

ABSTRACT

The present invention provides an optical fiber of which a zero dispersion wavelength falls within a range of between 1,250 nm and 1,350 nm inclusive, transmission loss at 1,550 nm is equal to or less than 0.185 dB/km, chromatic dispersion at 1,550 nm is within the range of 19 ± 1 ps/nm \cdot km, a dispersion slope at 1,550 nm is equal to or less than 0.06 ps/nm 2 \cdot km, an effective area A_{eff} is equal to or more than 105 μm^2 , a cable cutoff wavelength λ_{cc} is equal to or less than 1,530 nm, polarization mode dispersion is equal to or less than 0.1 ps/km $^{1/2}$, and a loss when the optical fiber is wound on a mandrel having an outer diameter of 20 mm is equal to or less than 10 dB/m.